Harris Land and Cattle Company
CONSERVATION EASEMENT

Environmental Assessment
Management Plan
Socio-Economic Assessment

Montana Fish, Wildlife & Parks

January 1998

Montana Fish, Wildlife & Parks

P.O. Box 6610
Great Falls, MT 59406-6610

January 9, 1998

To Whom It May Concern:

The Montana Fish, Wildlife and Parks Department (MFWP) is proposing to purchase a conservation easement from the Harris Land and Cattle Company for $1,500,000.00 plus the cost of implementing the grazing system (approximately $35,000.00). The Harris Land and Cattle Company property is 10,000 acres in size. It lies along Highwood Creek on the northwest slope of the Highwood Mountains approximately 30 miles east of Great Falls, Montana and adjacent to the town of Highwood.

This conservation easement is being proposed to conserve mule deer, sharp-tailed grouse and other wildlife habitat along Highwood, Gap and Keaster Creeks and to perpetuate the principle use of the property as a productive working cattle ranch.

Enclosed is an Environmental Assessment, Management Plan , Socio-Economic Report, and other related information for your review. The comment period will be open through February 12, 1998.

Please send any written comments to the following address:

Montana Fish, Wildlife and Parks
attn: Harris Land and Cattle Company Conservation Easement
P.O. Box 6610
Great Falls, MT 59406-6610

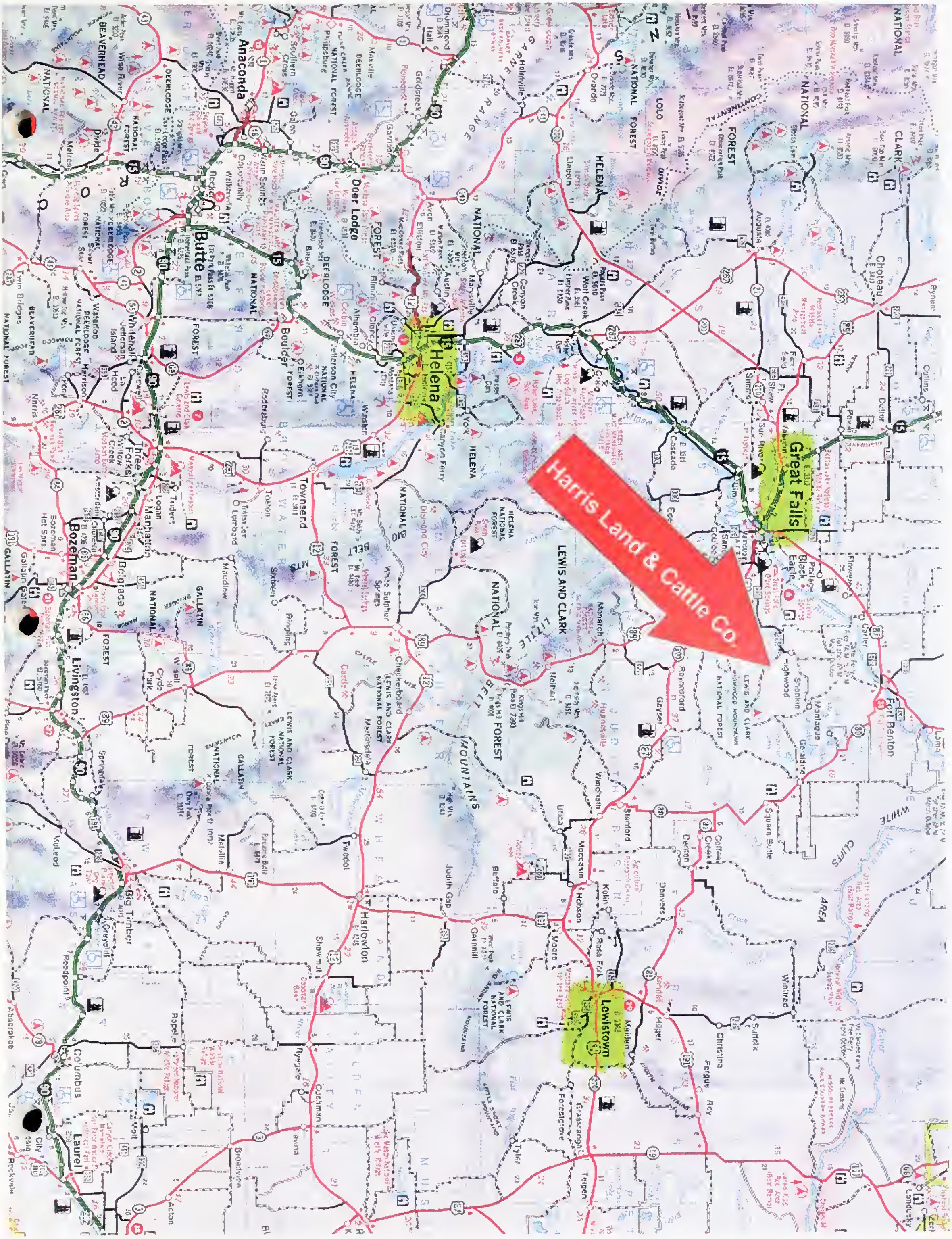
A public hearing on this proposed easement will be held at the Montana Fish, Wildlife, and Parks Region 4 headquarters in Great Falls, Montana on Wednesday, February 4, 1998 at 7:00 p.m.

Sincerely,

Mike Aderhold

Mike Aderhold
Regional Supervisor
Great Falls, Montana

PROJECT AREA MAP


Harris Land & Cattle Co
Helena
Great Falls
Lewistown
Butte
Anaconda
Bozeman
Livingston
Fort Benton
Columbus
Laurel
Townsend
Three Forks
Deer Lodge
Big Timber
Harlowton
Stanford
Geyser
Belt
White Sulphur Springs
Choteau
Augusta
Lincoln
Philipsburg
Whitehall
Boulder
Cascade
Highwood
Winifred
Denton
Roundup
Ryegate
Big Sandy
LEWIS AND CLARK NATIONAL FOREST
HELENA NATIONAL FOREST
GALLATIN NATIONAL FOREST
DEERLODGE NATIONAL FOREST
BEAVERHEAD NATIONAL FOREST
LITTLE BELT MOUNTAINS

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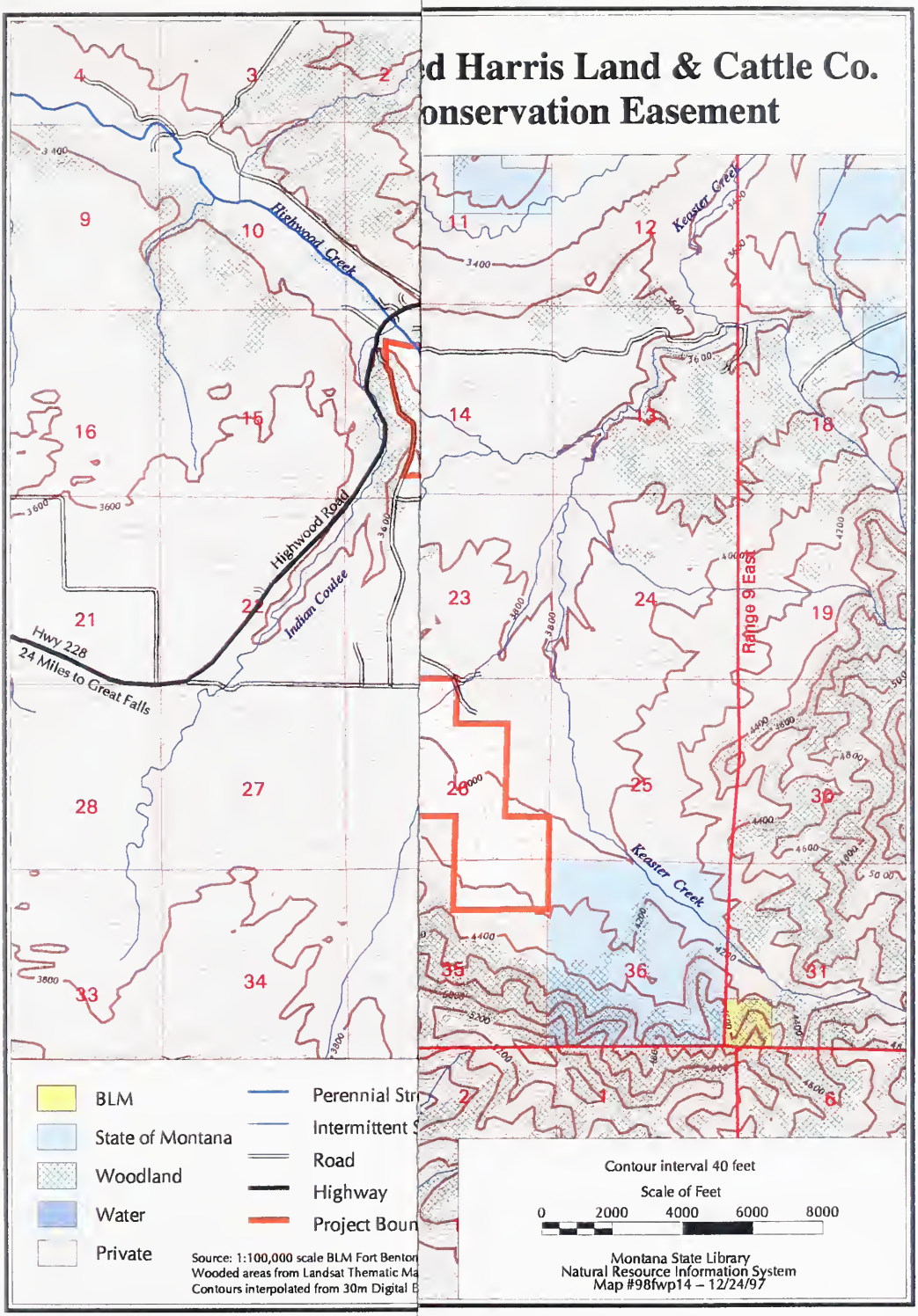
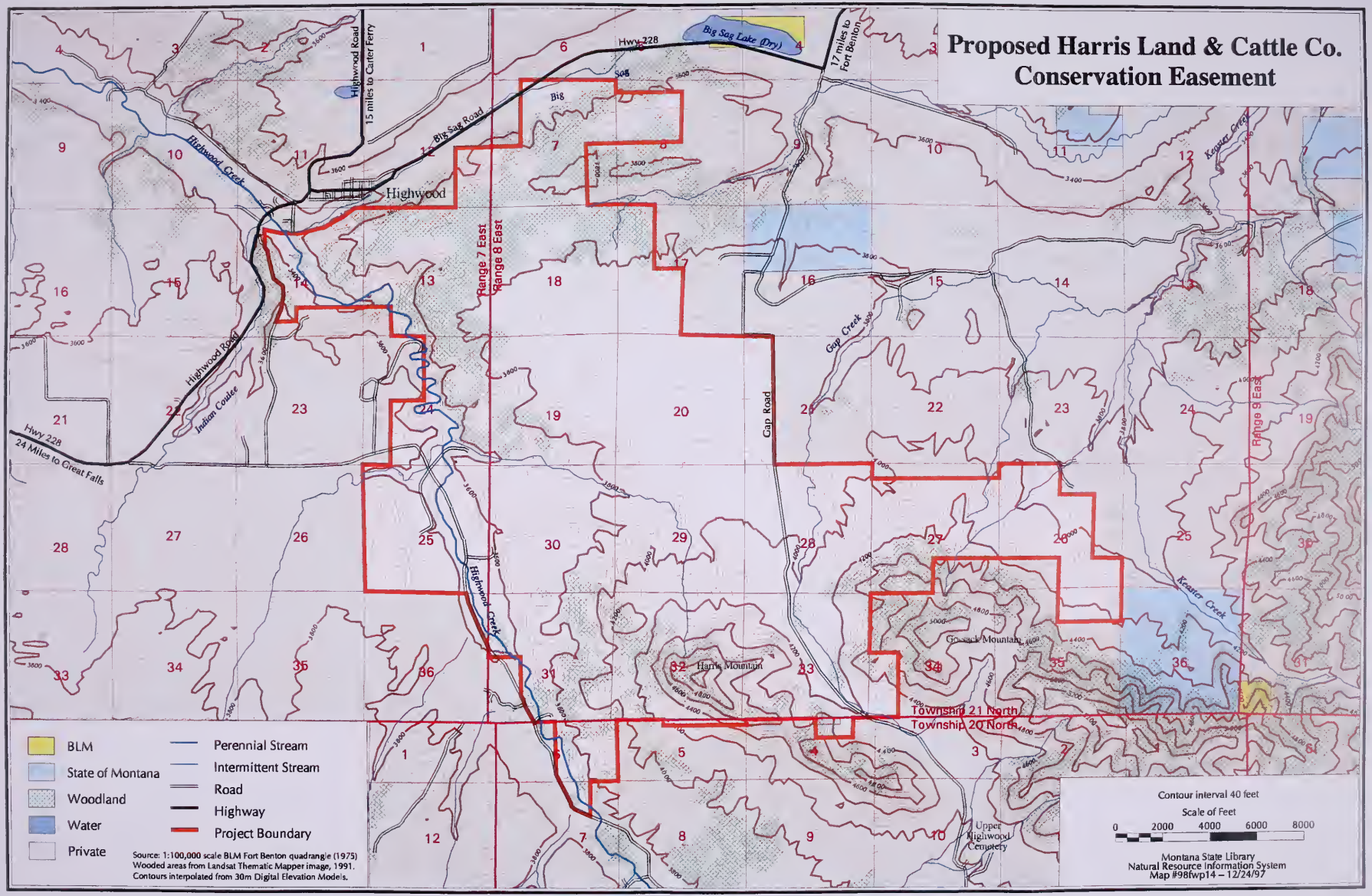
onservation Easement




Proposed Harris Land & Cattle Co.
Conservation Easement
Big Sag Lake (Dry)
Hwy 228
17 miles to Fort Benton
Highwood Road
15 miles to Carter Ferry
Big Sag Road
Highwood
Highwood Creek
Highwood Road
Indian Coulee
Hwy 228
24 Miles to Great Falls
Range 7 East
Range 8 East
Range 9 East
Gap Road
Gap Creek
Kaster Creek
Harris Mountain
Gosack Mountain
Upper Highwood Cemetery
Township 21 North
Township 20 North
BLM
State of Montana
Woodland
Water
Private
Perennial Stream
Intermittent Stream
Road
Highway
Project Boundary
Source: 1:100,000 scale BLM Fort Benton quadrangle (1975)
Wooded areas from Landsat Thematic Mapper image, 1991.
Contours interpolated from 30m Digital Elevation Models.
Contour interval 40 feet
Scale of Feet
0 2000 4000 6000 8000
Montana State Library
Natural Resource Information System
Map #98fwp14 – 12/24/97

DRAFT ENVIRONMENTAL ASSESSMENT

DRAFT ENVIRONMENTAL ASSESSMENT

Montana Fish, Wildlife and Parks
Wildlife Division

Draft Environmental Assessment

HARRIS LAND AND CATTLE COMPANY CONSERVATION EASEMENT

I. INTRODUCTION

Habitat Montana recognizes that certain native plant communities constituting wildlife habitat are worthy of perpetual conservation. Those communities include intermountain grasslands and riparian corridors. Properties owned by the Harris Land and Cattle Company include such habitats and warrant conservation considerations. A conservation easement was offered to Montana Fish, Wildlife and Parks (MFWP) by the Harris Land and Cattle Company. This offer reflects their desire to maintain and protect their agricultural lifestyle and production while enhancing or maintaining wildlife habitats. It is proposed that a conservation easement, to be held by MFWP, be purchased from the Harris Land and Cattle Company. This easement would keep the property in private ownership and operation, preserve important wildlife habitats and guarantee public hunting access.

II. AUTHORITY AND DIRECTION

MFWP has the authority under law (87-1-201) to protect, enhance and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. In 1987, the Montana Legislature passed House Bill (HB) 526 which earmarked hunting license revenues to secure wildlife habitat through lease, conservation easement, or fee title acquisition (87-1-241 and 242). This is now referred to as the Habitat Montana Program. As with other MFWP property interest proposals, the Fish, Wildlife and Parks Commission and the State Land Board (for easements greater than 100 acres or $100,000) must approve any easement proposed by the agency. This Environmental Assessment (EA) is part of that decision making process.

III. LOCATION OF PROJECT

This 10,000 acre property is located on the north-west slope of the Highwood Mountains along Highwood Creek approximately 30 air miles east of Great Falls in Chouteau County. The property lies between the town of Highwood and Harris Mountain. The entire property is within deer/elk/lion hunting district (HD) 447. A map of the property is included within this document.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTION

The primary purpose of this action is to preserve the integrity of the associated native habitats while maintaining agricultural land uses and ownership. The primary habitats represented on the Harris Land and Cattle Company property include intermountain grasslands and riparian corridors. By maintaining existing habitat acreage and quality, wildlife use, including year-round mule deer and sharp-tailed grouse use, will be perpetuated.

The Harris Land and Cattle Company property supports between 300-500 mule deer during winter (half of which are present year-round). Sharp-tailed grouse occupy the property year-round. Numerous sharp-tailed grouse breeding grounds are present on the property. The riparian cottonwood forest along Highwood Creek provides breeding habitat for numerous resident and migratory bird species. In addition, it is not unusual for parts of the Harris Land and Cattle Company property to receive elk use during the fall and spring.

Other wildlife wholly or partially dependent upon habitats represented on the Harris Land and Cattle Company include ring-necked pheasant (year-round with winter concentrations), white-tailed deer (year-round with winter concentrations), mountain lion (occasional), antelope (spring, summer and fall), black bear (occasional) and other game and nongame species affiliated with native prairies and riparian complexes. Highwood Creek supports a sport fishery of rainbow and brook trout.

A secondary result of this project is guaranteed public hunting access. While one section of state trust land is accessible from the Harris Land and Cattle Company property, the bulk of hunting use will be on the Harris Land and Cattle Company's deeded land.

The need for this project is not established merely by habitats or wildlife use. Rather, the need is linked to threats directed towards those native habitats. These threats manifest themselves as residential subdivision, excessive livestock use, sodbusting of native range and associated detriments such as noxious weed encroachment and increased wildlife disturbance and removal. This threat level is evident locally and on a statewide basis. MFWP has determined that intermountain grasslands and riparian habitats have and continue to receive the brunt of residential subdivision development across the state. The Harris Land and Cattle Company property has the potential to become a bedroom community for the city of Great Falls. Livestock use including adequate considerations for ground nesting game and nongame birds is compatible with agricultural production but is not always firmly established in farm and ranch operations. This project would ensure sound practices across time and with future landowners. Since HD 447 is 65% private land, guaranteed public hunting access on the Harris Land and Cattle Company will offer hunting opportunity in an area where access has been and continues to be limited.

V. DESCRIPTION OF PROPOSED ACTION

The proposed action is for MFWP to purchase, hold and monitor a conservation easement on the Harris Land and Cattle Company Ranch. This easement would include 10,000 acres of the ranch which is all of the deeded Harris Land and Cattle Company property. MFWP would purchase the conservation easement for $1,500,000.00 plus the cost of materials required to implement the grazing system (approximately $35,000.00) with funds from the Habitat Montana Program.

Specific terms of the easement in their entirety are contained in a separate legal document which is the "Deed of Conservation Easement". This document lists MFWP and landowner rights under the terms of the easement as well as restrictions on landowner activities. The rights of both parties and restrictions on landowner activities were negotiated with and agreed to by MFWP and the landowner.

To summarize the terms of the easement, MFWP's rights include the right to: (1) identify, preserve and enhance specific habitats; (2) monitor and enforce restrictions; (3) prevent activities inconsistent with the easement; (4) public hunting access, which includes walk-in only access Friday through Monday for a minimum of 4 parties (party defined as 1-3 people) per day during the fall hunting seasons with no more than 2 of those parties on any hunting day prior to the general rifle season being bird hunters. Following the opening of the general rifle season, no more than 1 party will consist of bird hunters.

Landowners' retained rights include the right to: (1) continue to reside on the ranch in one of the existing residences and build up to three new residences at locations identified in this easement; (2) continue operation of their cattle operation within the described rest-rotation grazing system; (3) continue to cultivate and farm existing haylands and cultivated fields; (4) continue to regulate public use of the land at all times; (5) develop and maintain water resources, including springs, on the land necessary for the grazing, wildlife and domestic purposes that are allowed by this easement, and to develop and market spring water from 2 springs; (6) repair, renovate or improve existing buildings, corrals, roads and irrigation structures; (7) construct, remove, repair or replace fences while maintaining the rest-rotation grazing system; (8) explore, develop and extract oil, gas and other hydrocarbons following the Rocky Mountain Front Oil and Gas Guidelines; (9) replace or construct a barn in a designated building area; (10) construct facilities for the development and utilization of energy resources such as wind, solar, hydroelectric, methane and alcohol; (11) use agrichemicals for the control of noxious weeds; (12) rent dwellings for guest ranching purposes; (13) install utility structures; (14) harvest of timber, subject to State of Montana Best Management Practices.

Restrictions placed upon the landowners' activities include: (1) no removal, control or manipulation by any means of shrub species browsed by wildlife (including but not limited to: aspen, rose, hawthorne, snowberry, chokecherry and skunkbrush); (2) no subdivision less than 640 acre parcels and then only for agricultural purposes and subject to the continuing terms of the easement; (3) no sodbusting; (4) no new cultivation or farming of the native rangelands and agricultural activities must be carried out in a manner conducive to plant, soil and water quality maintenance (adherence to a described grazing plan which does not include an AUM cap); (5) no outfitting or fee hunting; (6) no surface mining except that gravel and rock may be extracted for use on the property; (7) no commercial feed lots; (8) no game farms; (9) no refuse dumping.

VI. DESCRIPTION OF REASONABLE ALTERNATIVES TO THE PROPOSED ACTION

The Harris Land and Cattle Company initiated the conservation easement process and at no point expressed interest in sale of fee title or a long term lease. Since conservation easements are also MFWP's preferred option, the only other reasonable alternative considered in this EA is the "No Action Alternative".

1. No Action Alternative

Under the "No Action Alternative" the Harris Land and Cattle Company ranch would continue to be managed as in the past but there would be no guarantee of the preservation of current habitat amounts and qualities as they are found on the Harris Land and Cattle Company ranch. Specifically, without the proposed easement current native habitats are vulnerable to future residential subdivision, sodbusting, improper livestock grazing, commercial feedlots, timber extraction and surface mining. These activities would likely result in decreased habitat quantity and quality and wildlife use. The magnitude of these and other potential impacts to this and adjacent physical and human environments are difficult to measure due to the uncertainty of future events. There is no guaranteed public hunting access to these lands without this easement.

VII. EVALUATION OF IMPACTS ON THE PHYSICAL ENVIRONMENT

Through prevention of certain identified activities, this conservation easement will legally maintain or improve existing habitats in perpetuity. Impacts associated with this proposed action shall be determined only as they apply to current resource ownership, uses and

conditions. Under the no action alternative, resource ownership, uses and conditions may or may not change. Consequently, impacts associated with the no action alternative are unknown.

1. Land Resources

Impact of proposed action:	No negative impact would occur as a result of this proposal. The terms of the proposed easement are structured to prevent adverse impacts on soils and vegetation. Subdivision and development of the land is restricted, as is additional cultivation. The proposed easement will ensure that the land resources are maintained.
No Action alternative:	This alternative would allow for potential disturbance of soils from more intense agricultural practices and residential development.

2. Air Resources

Impact of proposed action:	No impact.
No action alternative:	There would be no immediate impact. However, if land were to be subdivided, more human activity could potentially degrade the current air quality.

3. Water Resources

Impact of proposed action:	There would be no impact in perpetuity over what is currently associated with a working livestock operation. Current agricultural uses on the property have proven to be generally compatible with maintenance of water quality. Any logging activity will be conducted using best management practice to protect water quality.
No action alternative:	There would be no immediate impact.

However, there would be no assurances that over time the property wouldn't change from primarily agriculture to some other use, with no conservation protection.

4. Vegetation Resources

Impact of proposed action: This action will result in a positive impact. The terms of the easement protect the quantity, quality and character of the native plant communities found on the property. The prescribed grazing program will allow and foster native vegetation establishment, recovery and maintenance on all sites within the pasture system.

No action alternative: There would be no immediate impact. If the land use were to change from agriculture to subdivision or some other use there would be no conservation measures in place to maintain productivity of the land. In addition, there would be no long term protection of existing native plant communities.

5. Fish/Wildlife Resources

Impact of proposed action: This action will result in a positive impact overall. The terms of this easement conserve the land as agricultural and open space for deer winter range and yearlong habitat for many of Montana's native wildlife species. The prescribed grazing program, with acreage dedicated to yearlong grazing rest periods, will directly benefit these species and others. There would be no barriers erected which would limit wildlife migration or daily movements. Conserving native plant communities is important for most of Montana's indigenous wildlife species.

No action alternative:	There would be no immediate impact. However, there would be no assurances that over time the property wouldn't change from primarily agricultural to some other use, with no conservation protection.

6. Adjacent Land

Impact of proposed action:	No negative impact is expected. The property will be maintained as has historically occurred. New public hunting access may relieve some hunting pressure on adjacent landowners. The grazing plan will not impact any school trust lands as the property is a contiguous block owned in fee-title by the landowners.
No action alternative:	Unknown.

VII. EVALUATION OF IMPACTS ON THE HUMAN ENVIRONMENT

Through prevention of certain identified activities, this conservation easement will legally maintain or improve existing habitats in perpetuity. Impacts associated with this proposed action shall be determined only as they apply to current resource ownership, uses and conditions. Under the no action alternative, resource ownership, uses and conditions may or may not change. Consequently, impacts associated with the no action alternative are unknown.

1. Noise/Electrical Effects

Impact of proposed action: No impact would occur over existing conditions.

No action alternative: There would be no immediate impact.

2. Land Use

Impact of proposed action:	There would be no impact on the productivity or profitability of the ranch nor conflicts with existing land uses in the area. The maintenance of a rest-rotation grazing program influences the method of use but does not impact the type of land use.
No action alternative:	No immediate impact would occur. However, with changes in land ownership and land use in the future, habitat quality, current wildlife numbers and recreational opportunity could be diminished.

3. Risk/Health Hazards

Impact of proposed action:	No impact would occur.
No action alternative:	No impact would occur.

4. Community Impacts

Impact of proposed action:	There would be no anticipated negative impacts to the community. The scenic values and open character of this property would be maintained and enjoyed by the community in perpetuity. Refer to the attached Socio-Economic Assessment for additional analysis of impacts on the human environment.
No action alternative:	Future residential development if unchecked would change the nature of the existing community to a varying degree.

5. Public Services/Taxes/Utilities

Impact of proposed action:	There would be no effect on local or state tax bases or revenues, no alterations of existing utility systems nor tax bases of revenues, nor increased uses of energy sources. As agricultural property, the land would continue to be taxed as it has before. Refer to the attached Socio-Economic Assessment for additional analysis of impacts on the human environment.
No action alternative:	As residential subdivision increases, burdens for police and fire protection, road improvements, schools, utilities and services would be demanded.

6. Aesthetics/Recreation

Impact of proposed action:	There would be a positive impact. The easement would maintain in perpetuity the quality and quantity of recreational opportunities and scenic vistas and would not effect the character of the neighborhood. Public hunting access will increase recreational opportunity in this area.
No action alternative:	No immediate impact would occur, however there would be no guarantee of public hunting access to the land. Eventual subdivision and development would reduce the aesthetic and recreational quality of the area.

7. Cultural/Historic Resources

Impact of proposed action:	There would be no impact.
No action alternative:	There would be no anticipated impact.

8. Socio-Economic Assessment

Refer to the attached Socio-Economic Assessment for additional analysis of impacts on the human environment.

IX. SUMMARY EVALUATION OF SIGNIFICANCE

The proposed action has no significant effects on current conditions. It cannot be definitively determined what, if any, effects result from the no action alternative.

X. EVALUATION OF NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT

Based on the above assessment, an Environmental Impact Statement is not required and an EA is the appropriate level of review.

XI. PUBLIC INVOLVEMENT

The public comment period will begin on January 12, 1998 and run through 11:59 pm on February 12, 1998. Written comment may be submitted to:

Montana Fish, Wildlife and Parks
attn: Harris Land and Cattle Company Conservation Easement
P.O. Box 6610
Great Falls, MT 59406-6610

In addition, there will be a public hearing on Wednesday, February 4, 1998 at the MFWP Regional Headquarters in Great Falls, MT at 7:00 pm.

XII. NAME, TITLE AND PHONE NUMBER OF PERSON RESPONSIBLE FOR PREPARING THIS EA

Jim Williams, Wildlife Biologist, Montana Fish, Wildlife and Parks, P.O. Box 6610, Great Falls, MT 59406, 454-5840.

DRAFT MANAGEMENT PLAN

Montana Fish, Wildlife and Parks
Wildlife Division

Draft Management Plan

HARRIS LAND AND CATTLE COMPANY CONSERVATION EASEMENT

I. INTRODUCTION

The Harris Land and Cattle Company has both intermountain grassland and riparian habitat types represented on the property. These habitat types are specifically targeted by the Habitat Montana program. The primary game species present on the Harris Land and Cattle Company property are mule deer and sharp-tailed grouse although the property provides seasonal or year-round habitat for other species including elk, white-tailed deer, antelope, ring-necked pheasant and ruffed grouse. Under House Bill 526, this program utilizes funds generated from hunting license fees to purchase appropriate conservation easements. The purpose of the Harris Land and Cattle Company conservation easement is to preserve these habitats and wildlife use while maintaining private ownership and use of the property.

II. GOAL, OBJECTIVES, CONCERNS AND STRATEGIES

GOAL: By implementation of easement terms, the quality and amounts of native habitats and wildlife potential currently found on the Harris Land and Cattle Company property shall be maintained without displacing private land use. Under the same easement terms, a secondary goal is to provide guaranteed public hunting access and opportunity. This shall be accomplished with minimal impact to this and adjacent physical and human environments.

Objective 1: Manage the grassland, shrubland, and riparian vegetation to maintain and improve these plant communities for the benefit of wildlife and livestock.

While this property is certainly capable of sustaining livestock use under sound management practices, unregulated or excessive livestock use has the ability to reduce habitat quality with corresponding wildlife use/number reductions or displacements. Reduced habitat quality often reduces agricultural grazing potential as well.

To perpetually define and ensure sound grazing practices across time and landowners, this easement maintains a rest-rotation grazing system on most areas receiving growing season use. For pasture numbers and delineation and seasons of use, see the attached grazing plan and schematics.

The grazing plan adherence and effectiveness will be monitored. Cattle performance and distribution will be assessed with the Department recommending fences, salt grounds and water improvements to the landowner if necessary. Compliance with pasture open and close dates will be reviewed. Photo points may be established in appropriate areas to monitor long and short term vegetation condition and changes.

Many shrub species are important mule deer foods (see mule deer food items list in the Management Plan Attachments). The removal, control or manipulation by any means of shrub species important to wildlife is prohibited, including but not limited to the burning, plowing, chemical treatment or removal of such shrub species. These species include without limitation aspen, rose, hawthorne, snowberry, chokecherry and skunkbush. These prohibitions do not apply to the routine clearing or control of brush in connection with the construction and maintenance of trails, roads, fences and structures permitted under this Easement.

Farming activity will be permitted on existing farm ground only. Additional sodbusting is not permitted under this conservation easement. If the landowner desires, the department will provide technical assistance for seeding farm ground with a vegetation mix that would be beneficial to wildlife. This may be, but is not limited to, participation in a Federal Conservation Reserve Program project or a Montana Fish, Wildlife and Parks Upland Game Bird Habitat Enhancement Program project.

Land maintenance, including but not limited to fence and water development construction and repair, noxious weed control and necessary road construction and repair, shall be the responsibility of the landowner.

Objective 2: Maintain wildlife use of the property.

As per easement conditions, woven wire fences and other similarly impenetrable wildlife barriers will not be constructed on the property except around stackyards, domestic gardens, corrals and holding pens.

Current mule deer numbers observed on the ranch range from 300-500 animals, depending upon the time of year. On the Harris Land and Cattle Company ranch and adjacent properties, game damage problems will be managed through public hunting whenever possible during general season frameworks. Game damage materials will be provided on an as needed basis to the ranch and adjacent landowners who allow public hunting.

In order to maintain use of existing wildlife habitat, vegetation communities and distribution will be mapped in the Baseline Inventory so that vegetation changes can be monitored over time.

There may be habitat enhancement opportunities for upland game birds which are not addressed in this easement. The department will review the ranch's potential for habitat enhancements and pursue habitat projects which are of interest to the landowner and meet habitat program objectives.

Objective 3: Provide guaranteed public hunting access and opportunity.

To provide a mechanism for the general public to place a reservation and hunt the Harris Land and Cattle Company property, the Department shall offer to the landowner but not limit him to Block Management options. These may include a telephone reservation system if the landowner is interested, sign-in box, and map/sign production. Walk-in access shall originate from public roads at identified park-and-walk areas. Should the landowner decide not to participate in block management, the landowner must develop an equally effective system for handling hunter requests within the easement terms. With or without block management, there will be a mechanism (permission slips, sign-in rosters or equally effective method) to document annual hunter use at the end of the general big game season.

III. OVERALL EASEMENT COMPLIANCE

A baseline inventory will be conducted to determine the current status of the entire property. This shall be used across time and landowners to assess easement effectiveness and landowner compliance with the easement. The Department will visit the property in a timely fashion to monitor compliance with all easement stipulations and to assist landowner interpretation of the easement and management plan. The landowners are encouraged to thoroughly familiarize themselves with easement terms and the management and grazing plans and to refer to the documents or the Department with any questions or concerns in order to avoid noncompliance. Noncompliance will be dealt with through arbitration as addressed within the easement terms.

Management Plan Attachments

* Grazing System Pasture Rotation

* Grazing System Pasture Layout

* Mule Deer Habitat Information

HARRIS LAND & CATTLE COMPANY CONSERVATION EASEMENT LIVESTOCK GRAZING ROTATION

REMARKS	PASTURES*	1998	1999	2000
spring/fall	11	A'	B'	A'
spring/fall	16	B'	A'	B'
The majority of livestock will be moved from the A to the B treatment pasture at seedripe.	1,2	A	B	C
	4	B	C	A
	5,7,8	C	A	B
utility/calving pasture	3	This pasture is used during spring and fall at the landowners discretion for calving and fall pasture. Very little use occurs during the summer		
winter	6	D	D	D
farmland	13	D'	D'	D'
mostly farmland	12	Use at landowners discretion (mostly fall use).		
native range/farmland	10	D'	D'	D'
small field	Hay	Use at landowners discretion.		
small field	Horse Pasture	Use at landowners discretion.		
small field	Feed Lot	Use at landowners discretion.		
calving	15A	E	E	E
utility pasture occasionally used other seasons	15B	Grazed during late May		
hay	15	Use at landowners discretion.		
bull pasture	14	Use two weeks in spring/fall bull pasture.		

*Refer to map for pasture locations

A= Livestock grazing late May (rapid growth initiation) to 10/15

A'= Livestock grazing late-April to May 31.

B = Livestock grazing from seedripe on bluebunch wheatgrass (appx August 1) to December 1

B'= Livestock grazing November 1 to mid-December

C = Rest, no livestock grazing.

D = Livestock grazing mid-December to mid-February

D'= Livestock grazing from October 1 to mid-December

E = Livestock grazing mid-January to mid-March

In year four (2001) the rotation is repeated.

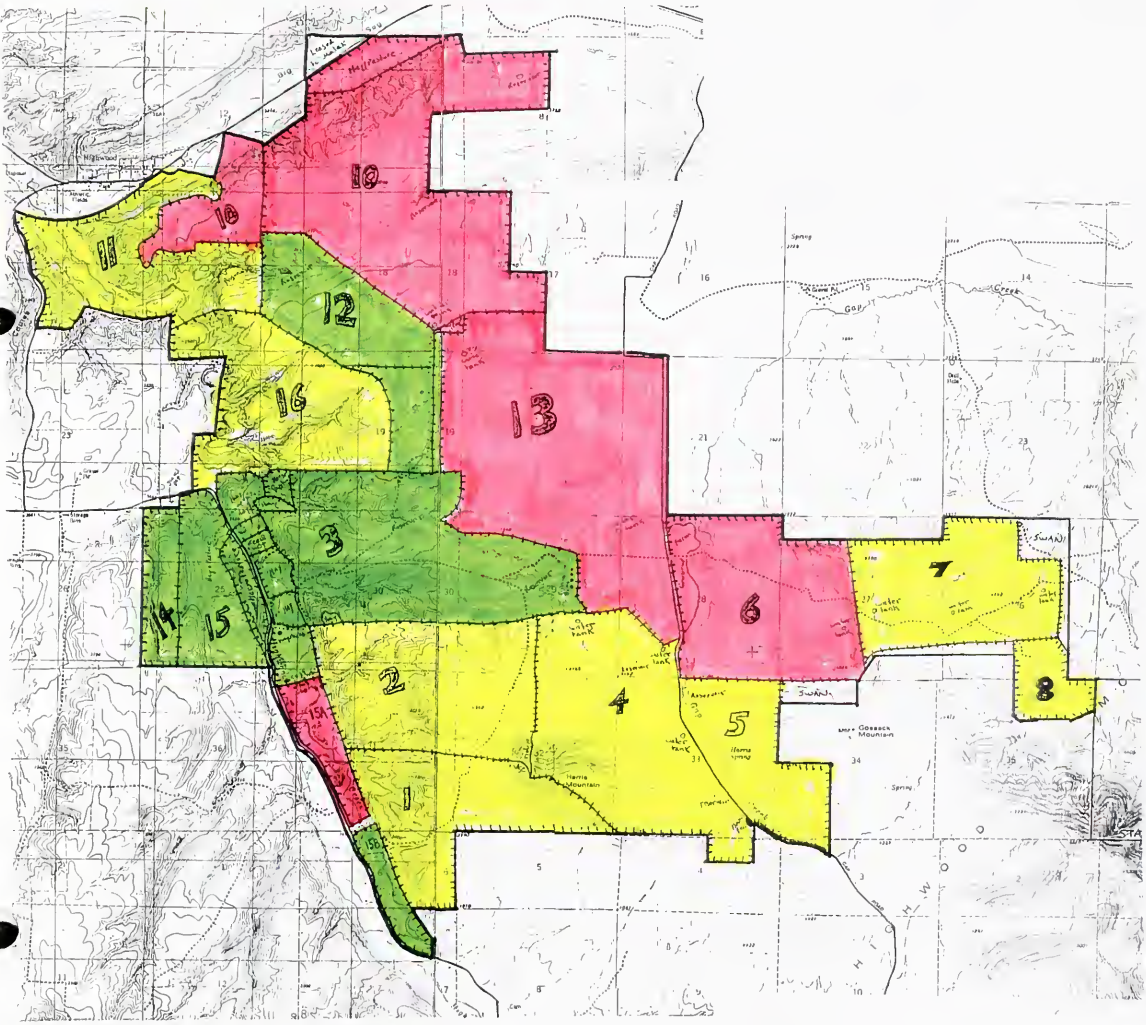
Seed ripe time and determination of initiation of rapid plant growth will be based on the development of bluebunch wheatgrass

HARRIS LAND & CATTLE COMPANY CONSERVATION EASEMENT LIVESTOCK PASTURE LAYOUT

LEGEND

N

- Primary Rest Rotation Grazing System Pastures
- Fall or winter livestock grazing only (non growing season)
- Calving, hay fields, feed lot, utility or other special use pastures.



Habitat Characteristics of the Harris Land and Cattle Company property that relate to Mule Deer Biology

Mule deer are typically associated with rough terrain in the northern Great Plains. The rough breaks of Highwood Creek and Harris Mountain on the Harris Land and Cattle Company property offer year-round mule deer habitat. Rough terrain provides mule deer forage species that are available in winter by minimizing snow accumulation (Wood 1988). Brush-filled coulees also provide escape terrain for mule deer and shelter from the wind (Wood 1988).

Kufeld et al. (1973) compiled a list of the most common mule deer forage species cited in the scientific literature. Approximately 31 (78%) of the 40 most common mule deer forage species cited in his research are present or suspected to be present on the Harris Land and Cattle Company property. The presence of these mule deer food items on the property underscores the importance of this habitat conservation project to mule deer. The following table presents the forage species and occurrence:

Type of Mule Deer Forage	Number of Citations in Mule Deer Research Literature	Occurrence or Suspected Occurrence on Harris Land and Cattle Company
BROWSE		
Snowberry	69	Yes
Big Sagebrush	67	Yes
Rose	67	Yes
Chokecherry	64	Yes
Bitterbrush	52	No
Quaking Aspen	49	Yes
Oregon Grape	47	No
Willow	45	Yes
Serviceberry	41	Yes
Curlleaf Mountain Mahogany	39	No
Rubber Rabbitbrush	37	Yes
Ponderosa Pine	32	Yes
Rocky Mountain Juniper	28	Yes
Tobacco Brush	26	No
Skunkbush	24	Yes
True Mountain Mahogany	23	No

Gambel Oak	21	No
GRASSES AND SEDGES		
Bluegrass	31	Yes
Wheatgrass	29	Yes
Chess	22	No
Sedge	22	Yes
Fescue	10	Yes
Squirreltail	7	No
FORBS		
Buckwheat	63	No
Aster	50	Yes
Lupine	49	Yes
Phlox	46	Yes
Beardtongue	38	Yes
Fleabane	35	Yes
Balsamorrhiza	33	Yes
Sagebrush	32	Yes
Cinquefoil	30	Yes
Yarrow	27	Yes
Fringed Sagebrush	27	Yes
Alfalfa	26	Yes
Thistle	25	Yes
Dandelion	25	Yes
Pussytoe	22	Yes
Vetch	22	Yes
Clover	21	Yes

Kufeld, R.C.; Wallmo, O. C.; and Feddema, C. 1973. Foods of the Rocky Mountain Mule Deer. USDA Forest Service Research Paper. RM-111. 31pp.

Wood, A. K. 1988. Use of Shelter by Mule Deer During Winter. Prairie Naturalist 20(1):15-22.

Background Information on Montana Conservation Easements

DAVE HOOKS

LANDS LEGACY

CONSERVATION EASEMENTS: A True Partnership

SAM WILLIAMS

by STEVE KNAPP

Montana Fish, Wildlife & Parks (FWP) has always had land conservation and management as part of its mission. Without appropriate habitat, wild animals will cease to exist, no matter how many rules and regulations are imposed.

Since the 1940s, direction of the department's wildlife program has been based on Aldo Leopold's fundamental tenet that "game management is the art of making the land produce sustained annual crops of wild game for recreational use." Concurrent with this direction has been development of an active "land program."

Initially, the main objective of the land program was acquisition of critical habitat for game animals—primarily winter range for elk, and nesting and resting areas for

waterfowl. Lands generally were chosen to accommodate a single species or group of species, and developed and managed to enhance these species. Land uses viewed as being in competition with the wildlife resource, such as livestock grazing, were eliminated. The department's wildlife program continued on this path from 1940 until the mid-1970s.

As the wildlife profession continued to grow and mature, wildlife managers learned that different land uses did not have to compete, but could be mutually beneficial. For example, livestock grazing, when managed with a focus on the land and plants, can enhance wildlife production.

Today, FWP's wildlife program still operates on Leopold's tenet, but our approach to making the land produce sustainable crops of wildlife has broadened. Management decisions on wildlife lands now revolve around improving the land's capability for the benefit of many species and uses. In some cases, agreements have been negotiated with private landowners allowing them to utilize department lands for rest-rotation grazing in return for like habitat management on their own lands. Sharecropping of department-owned agricultural lands is also practiced when it provides benefits to wildlife.

In 1987, the sportsmen and women of Montana proposed legislation to provide a stable, earmarked source of funding for FWP's wildlife habitat acquisition program. The resulting law, referred to as House Bill 526 (today part of a program known as "Habitat Montana"), sets aside approximately $2.8 million annually in hunting license dollars for habitat conservation.

Although acquiring land in fee title can be effective in conserving important habitats, it can do so for only a relatively small amount of land. Land values and social resistance preclude purchase of extensive acreages. From 1940 through 1990, a period of half a century, the department acquired interest in only about 380,000 acres—less than half of one percent of the state's land area—for wildlife management areas. About half of this was in fee title (complete ownership); the remainder involved leases or other management agreements.

The 1987 Legislature, while recognizing that fee title is a valid tool in some cases, directed the department to use *conservation easements* to conserve wildlife habitat whenever possible. A conservation easement is a legal agreement between a property owner and another entity (in this case, FWP) that restricts the type and amount of development that may take place on the property. In return the landowner receives certain benefits, monetary or otherwise. Each easement's restrictions are tailored to the property, the interests of the landowner, and the interests of the acquiring party.

To better understand the easement concept, think of owning land as holding a bundle of rights. A landowner may sell or give away the whole bundle, or just one or two of these rights—for example, the right to construct buildings or to

Answers to Common Questions

Why Grant a Conservation Easement?

People grant conservation easements to protect their land from inappropriate development *while retaining private ownership*. By granting an easement in perpetuity, the owner may be assured that the resource values of his or her property will be protected indefinitely, no matter who the future owners are. Granting an easement can also yield tax savings, as discussed below.

DAVE BOOKS

What Kind of Property Can Be Protected by an Easement?

Any property with significant conservation or historic preservation values can be protected by an easement. This includes forests, wetlands, farms and ranches, endangered species habitat, beaches, scenic areas, historic areas, and more. Land conservation professionals can help you evaluate the relative features of your property.

Who Can Grant an Easement?

Any owner of property with conservation or historic resources may grant an easement. If the property belongs to more than one person, all owners must consent. If the property is mortgaged, the owner must obtain an agreement from the lender to subordinate its interests to those of the easement holder so that the easement cannot be extinguished in the event of foreclosure.

How Restrictive is an Easement?

An easement restricts development to the degree that is necessary to protect the significant values of that property. Sometimes this prohibits construction, sometimes it doesn't.

If the goal is to preserve a pristine natural area, for example, an easement may prohibit all construction, as well as activities that would alter the land's present natural condition. If the goal is to protect farm or ranch land, however, an easement may restrict subdivision

A conservation easement is an agreement restricting the type and amount of development that may take place on a property. In return the landowner receives certain benefits, monetary or otherwise.

subdivide the land. By giving up certain rights or agreeing to certain restrictions, a property owner grants an easement. By purchasing an easement, FWP can ensure that activities detrimental to wildlife (e.g., subdividing or sodbusting) do not take place, that public access is allowed, and that management practices beneficial to wildlife are used.

After the 1987 legislature directed FWP to endeavor to use easements, the department engaged consultants to ask the public what it expected from the habitat program. The results were incorporated in the Fish, Wildlife & Parks

and development while allowing for structures and activities necessary for and compatible with the agricultural operation. *Even the most restrictive easements typically permit landowners to continue traditional uses of the land.*

How Long Does an Easement Last?

An easement can be written so that it lasts forever. This is known as a perpetual easement. Where state law allows, an easement may be written for a specified period, and this is known as a term easement. Only gifts of perpetual easements, however, can qualify a donor for income and estate tax benefits. Most conservation organizations accept only perpetual easements.

An easement runs with the land—that is, the original owner and all subsequent owners are bound by the restrictions of the easement. The easement is recorded at the county or town records office so that all future owners and lenders will learn about the restrictions when they obtain title reports.

What Are the Grantee's Responsibilities?

The organization or agency receiving the easement is responsible for enforcing the restrictions that the easement document spells out. To do this, the agency monitors the property typically once a year, usually accompanied by the owner. They determine whether the property remains in the condition prescribed by the easement and documented at the time of the grant. If a monitoring visit reveals that the easement has been violated, the agency has the right to require the owner to correct the violation.

How Can Donating an Easement Reduce a Property Owner's Income Tax?

The donation of a conservation easement is a tax-deductible charitable gift, provided that the easement is perpetual and is donated "exclusively for conservation purposes" to a qualified conservation organization or public agency. Internal Revenue Code Section 170(h) generally defines "conservation purposes" to include the following:

- The preservation of land areas for outdoor recreation by, or the education of, the general public.
- The protection of relatively natural habitats of fish, wildlife, or plants, or similar ecosystems.
- The preservation of open space—including farmland and forest land—for scenic enjoyment or pursuant to an adopted governmental conservation policy; in either case, such open space preservation must yield a significant public benefit.
- The preservation of historically important land areas or buildings.

To determine the value of the easement donation, the owner has the property appraised both at its fair market value without the easement restrictions and at its fair market value with the easement restrictions. The difference between these two appraised values is the easement value. Detailed federal regulations govern these appraisals.

Adapted with permission from The Conservation Easement Handbook, *by Janet Diehl and Thomas S. Barrett.*

Commission's "Habitat Montana" policy, which calls for services and benefits that:

- Conserve and enhance land, water, and wildlife.
- Contribute to hunting and fishing opportunities.
- Provide incentives for habitat conservation on private land.
- Contribute to nonhunting recreation.
- Promote habitat-friendly agriculture.
- Maintain the local tax base through payments in lieu of taxes for real estate, while demonstrating that productive wildlife habitat is compatible with agriculture and other land uses.

To see how the conservation easement process works, let's look at an example in which FWP worked with a landowner to obtain easements on three distinct properties totaling about 40,000 acres in four eastern Montana counties (for details, see "Good Deeds Without Deeds," *Montana Outdoors*, September-October 1994). The landowner, who had cooperated with FWP on habitat projects and had been involved in the block management (hunting access) program, wanted to increase his land base for livestock operations. He saw an opportunity to do this through acquisition of an FWP parcel with conservation easements already attached. The department, in turn, saw an opportunity to conserve sagebrush-grassland and riparian habitats on this landowner's holdings and provide public hunting recreation in perpetuity. The parties began to talk, negotiate, ponder, and discuss. The terms finally agreed upon are somewhat different for each property, but they are primarily as follows:

Landowner rights.—The landowner retains all rights not specifically restricted.

Restrictions on landowner activities.—(1) Removal of sagebrush is prohibited; (2) subdivision of the ranch is prohibited, except for agricultural purposes; (3) additional building is restricted; (4) game farming is prohibited; (5) additional cultivation of rangeland is prohibited; (6) renting, leasing, or sale of access to the land for hunting purposes is prohibited.

Department rights.—(1) The right to permanently preserve, protect, and enhance wildlife habitat, particularly sagebrush-grassland vegetation, through use of a rest-rotation grazing plan; (2) the right to enter the land to enforce the restrictions, and to establish and maintain vegetation monitoring transects and enclosures; (3) the right to provide for and manage, in coordination with the landowner, public access for hunting.

The fact that the landowner agreed to these terms implies that he gained what he wanted and felt reasonably comfortable with what the department wanted. How well did the easements meet the goals of the Fish, Wildlife & Parks Commission's Habitat Montana policy? Let's look.

- Land, water, and wildlife is conserved and enhanced by prohibitions on sodbusting and subdividing. The game farming prohibition prevents potential conflict with wildlife.
- Hunting access is provided in perpetuity.
- The grazing system—the primary habitat conservation provision—ensures that healthy sagebrush grassland vegetation is available to wildlife in perpetuity.
- Nonhunting recreation is not part of this particular easement.
- Habitat-friendly agriculture, through the rest-rotation grazing system, is promoted.
- County tax bases are not affected.

It appears the terms for these properties generally fulfill the needs of the landowner and follow Commission policy. The landowner retains and expands a viable agricultural operation, and the land is kept in a traditional pattern of use that benefits wildlife. The department conserves wildlife habitat over the long term and sportsmen and women enjoy the fruits of a program funded by their license money.

In another 3,000-acre conservation easement negotiated by FWP in 1994, provisions benefiting wildlife and recreationists were established for a portion of the Mannix Ranch near Helmville. When asked recently how he felt about the easement package for his ranch, David Mannix said, "It has worked out real well for us so far and we'd do it again in a heartbeat if the opportunity arose." Mannix acknowledged there is much to consider before completing a transfer that will affect a family property forever. "There's still a lot of water to go under the bridge and land management decisions to be made in partnership within the terms of the easement," he said.

County officials, too, see advantages to the program. For example, Jefferson County Commission Chairman Leonard Wortman has voiced support for a 7,000-acre easement recently completed for the Keogh Ranch north of Whitehall. "I can't see anything but benefits to the whole area," he said. "The project was an excellent idea and location."

This, then, is how conservation easements work. They do not take land out of private ownership and do not reduce county taxes. The easement terms are voluntarily agreed upon by both parties—a true partnership. ■

Winter Ranges for Elk and Deer: Victims of Uncontrolled Subdivisions?

Robert E. Henderson
Amy O'Herren

Elk and deer, like other terrestrial wildlife, are products of the land. As such, their fortunes depend on what happens to the land. During the past 20 years, efforts to protect wildlife habitat have focused primarily on public lands, which account for much of the acreage in the West. Legislation like the National Forest Management Act and the National Environmental Policy Act requires federal and state land management agencies to adopt plans and guidelines to protect habitat on most public lands into the future.

Protection of public lands alone, however, will not sustain present numbers of deer and elk. After spending summer and fall on high-elevation public land, most elk and deer migrate to winter/spring habitat at low elevations, often on private lands. Consequently, much of the winter range essential to these species has little assurance of protection.

Photo/Paul Begins

Montana is typical of many Western states, where changes in use of private lands are changing the landscape and wildlife habitat. The most perilous change for wild ungulates is the conversion of relatively large agricultural holdings to relatively small residential tracts. Urbanization began in Montana valleys in the late 19th century. Now, in the late 20th century, residential developments are spreading into the low-elevation foothills, where range and forestlands provide essential winter/spring habitat for elk, mule deer, white-tailed deer and other wildlife. Property rights issues and numerous landowners make it difficult to develop policies, programs and strategies to protect wildlife habitat on private property. How the land is used varies with changes in ownership and with modifications in owners' objectives.

Neither the problem nor recognition of it is new. In the wake of unregulated subdivision development, the Montana legislature passed the Subdivision and Platting Act of 1973. The law's intent was to provide a formal process for subdividing properties. After reviewing the 1973 act, Kiesling and Schneider (1978) reported that, in spite of subdivision laws, the rate of subdivision had increased, and "the fate of much valuable wildlife habitat and agricultural land hangs in balance." They further observed that, "rural subdivision and wildlife don't mix."

Development of private land cannot be expected to stop. Yet a variety of tools — subdivision design, land exchange, conservation easements — is available to protect habitat on private land. Dialogue with landowners can help identify which of these is most compatible with owners' objectives *and* protect lands of the greatest value to wildlife.

This article focuses on the Missoula Valley in western Montana, which supports growing urban and rural human populations and considerable numbers of wild ungulates. Here, some winter/spring habitat has already been converted to housing developments. Yet three winter ranges near Missoula still support more than 300 elk, numerous mule deer, white-tailed deer and other species. An examination of the situation in this area can illustrate the problems and possible solutions associated with development in many Western communities.

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Any wildlife species' abundance, distribution and health depend on the quality and quantity of available habitat. Organisms of all kinds conform to this principle. Each species is at once defined by and dependent on a range of environmental variables and environmental forces, and the organisms that depend on them vary temporally and spatially. Habitat changes that favor one species are often detrimental to another. For example, wildfires or clearcutting of a coniferous forest might severely reduce pine squirrel populations, but the resulting open habitat could be a bonanza for Columbian ground squirrels. Likewise, construction of houses on a grassy slope may benefit humans by providing shelter and other necessities, but the elk and deer that live there may experience an irretrievable loss of forage, cover and security.

Several studies provide some insight into the effects of subdivision on wildlife. Hayden (1975) studied the impact of rural subdivision on several wildlife species around Lolo, a small community 10 miles south of Missoula. He noted that rural residential development is most likely on properties that include a stream running through a valley or on adjacent, low-elevation hillsides. He also observed that these areas support a great diversity of vegetative and wildlife communities.

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Regulations do not always mean protection; once wildlife habitat is removed, the ecological system can be altered forever. Photo/Amy and Pat O'Herren

In such areas, road and home construction destroys some habitats outright. Development may remove or alter native vegetation and introduce exotic plants. Hayden found that cover is the wildlife requirement most jeopardized by rural subdivision: Interspersion and size of cover types are changed, and stages of succession are altered.

Pac and Mackie (1981) observed that in addition to cover, food and water, space — simply room to live — was required by free-ranging mule deer populations in the Gallatin Valley. As urbanization moved from valleys into mountains and foothills, it usurped the space necessary for deer and other wildlife. Vogel's (1983) study in the Bozeman Valley found that as house density approached four to eight homes per square kilometer, deer numbers began to decline dramatically.

Some species are more sensitive than others to residential development. In the Lolo study, elk, deer, moose, ducks, grouse, beaver and muskrat declined, while coyotes, red foxes, skunks, starlings and English sparrows did well in rural subdivisions (Hayden 1975). White-tailed deer were better able to use developed winter range near Bozeman than mule deer (Vogel 1983).

In addition to the physical changes in a developed area, land developments alter the quality of wildlife habitat in nearby undeveloped areas. Domestic pets and livestock often roam beyond the boundaries of the development. Both authorized and unauthorized use of nearby lands frequently increases. The resulting human disturbance can interrupt and displace the movement of both mule deer (Reed 1981) and elk (Weybright 1983) from summer to winter range. Displacement from favored resting, nesting and foraging sites can also occur (Hayden 1975). Mule deer and white-tailed deer exhibited more nocturnal behavior in and near subdivisions than on more secluded winter ranges (Vogel 1983).

The importance of winter habitat is well documented. Large ungulates seek out low elevations in winter months, when temperatures are at annual lows, palatable forage is scarce, and movement is difficult. Even at low elevations, the animals' fat reserves are depleted because the energy required to maintain life exceeds the energy provided by available forage. To a certain extent, deer and elk can reduce their energy expenditures through improved insulation, lowered metabolic rates and energy-efficient behavior. An individual's health and survival during this period depend on the rate at which energy is expended and the amount of energy available to it.

From a population standpoint, the number of deer and elk able to survive

this period depends on the availability of habitats where environmental stress is minimal and forage is available. Winter die-offs are well-known in Montana, when prolonged cold temperatures and deep snows are combined with a limited quantity or quality of winter habitat.

In the spring, when temperatures rise and snow recedes, deer and elk often seek even lower elevations with more southern exposure and less cover, because these are the first to produce new green foliage. Wild ungulates in Montana have evolved reproductive strategies to take advantage of the spring "green-up." After breeding in the fall, deer, elk, moose, sheep and goats have gestation periods that last until parturition in May and June. By April, 180 days into gestation, an elk fetus weighs nearly 5.5 pounds (Morrison et al. 1959). By parturition in June, after about 250 days of development, the newborn calf will weigh more than 35 pounds (Johnson 1951). With over 70 percent of fetal growth taking place during the spring green-up, the importance of spring habitat cannot be overstated. The health and weight of the newly born calf reflects its mother's ability not only to survive the winter, but also to consume large quantities of protein-rich, green forage during the spring.

Consequently, these habitats, where winter exerts such an influence on mortality rates and where spring so strongly affects birth rates, are doubly important to large wild ungulates.

Most deer and elk populations have a yearlong range many times the size of the winter/spring range. Population densities on these summer ranges, often quite far from those used in the winter, will also depend on the quantity and quality of winter/spring habitat.

Conservation efforts sometimes focus too narrowly on scenic public lands and do not provide adequate habitat protection for large, free-ranging species like elk and deer. An emerging scenario in the Missoula Valley illustrates this point.

Two winter/spring ranges on the north edge of Missoula, already diminished by development, still support about 200 elk and numerous mule deer. Radio telemetry studies by Weybright (1983) indicate that these animals move north to a summer range of more than 140 square miles, much of it in the Rattlesnake National Recreation Area and Wilderness. Most of the remaining winter range is privately owned and managed for livestock production. With human population pressures and changing market conditions, land divisions and developments may eventually reduce the winter range from its current 10 square miles to a handful of publicly owned acres. It would be ironic if the 10-year, multi-million-dollar effort to establish the Rattlesnake Wilderness Area produced fewer elk and deer, simply because of inadequate protection for winter/spring habitat on private land near Missoula.

The same winter/spring range, so important to deer and elk populations, hosts a variety of wildlife. Passerine birds seek out these areas, and a variety of ground-dwelling and avian predators congregate there because of the availability of prey. Spring is just as important for other species. Blue grouse court and nest in these areas. Black bears and grizzlies seek out carrion and the emerging grasses and forbs that become available first in the winter/spring ranges.

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Many people choose to live in rural developments to be closer to nature. As Jonkel and Demarchi (1984) observed in subdivisions in grizzly bear habitat, developments expose a constant stream of inexperienced people and their property to wildlife. Conflicts inevitably arise. Residents tend to view physically attractive and non-threatening wildlife species as valuable. Songbirds, squirrels and, to a point, deer are generally popular. But other species are often seen as pests. Coyotes, skunks, bears, bats, deer, cougar, beaver and woodpeckers are often viewed as problems and unwanted in the neighborhood.

State wildlife agencies now spend much of their time responding to frustrated, angry or frightened citizens complaining about nuisance wildlife. Arrandale (1991) reports that this is a nationwide trend, associated with urbanization of the country's wildlands. Region 2 of the Montana Department of Fish, Wildlife and Parks encompasses six counties, but more than 50 percent of both black bear and cougar complaints have come from people living in or near the Missoula city limits. Although many residents are tolerant of deer, Region 2 distributes more than five tons of blood meal to homeowners who want to deter browsing of their gardens, trees and shrubs.

The techniques and resources available for addressing these conflicts are limited and sometimes controversial, and they reduce the money and manpower needed for other management and law enforcement programs. Moreover, these efforts are supported by funds from hunting license sales, an irony not lost on sportsmen who are no longer allowed to hunt in these areas.

Yet wildlife adds to the marketability of residential developments. In a Missoula development along Rattlesnake Creek, the developers dismissed many opportunities to enhance wildlife habitat. After that habitat was removed during construction, the same developer promoted the subdivision as a place to view ". . .osprey catching fish, deer with fawns in the morning and evening, woodpeckers, raccoons, the sound of rippling water."

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The perception that wildlife habitat occurs only on public land is common but untrue. At least 80 percent of wildlife in the United States, excluding Alaska, depends on private land for essential cover, forage and security (Operation Stronghold 1991). The predominant use of these private lands is agricultural. Agricultural lands in western Montana include not only croplands, but also pastures, range, forest, riparian vegetation and wetlands.

About one million acres of agricultural land are permanently lost to development each year (U.S. Department of Agriculture 1981). As the demand for American farm products increases, so will the need for acreage. Marginal lands currently classified as cropland reserves will receive more pressure for intense agricultural development. Many of these "reserves" have thin soil, are located on steep slopes and lack the necessary moisture for productive farming. In addition, some marginal lands contain sensitive natural areas such as wetlands and bottomland forest. Cultivation of these lands has

serious impacts on the environment, ranging from increased erosion and siltation to removal of vital wildlife habitat.

In the past 10 years, Montana lost almost two percent (1.2 million acres) of its agricultural land base. This may seem insignificant considering the size of the state: 93 million acres, with 60,300,000 acres in agricultural use. However, there has been little evaluation of where these lands were lost and their possible wildlife impacts. If Montana follows national trends, prime farmland and, with it, prime wildlife habitat will be lost.

Agricultural lands are often converted to residential areas. Hayden (1975) reported that between 1963 and 1973, the area in suburban tracts increased from 36,501 to 289,876 acres in Montana, a 790 percent increase.

Wildlife habitat is most often lost when large, single-ownership tracts of agricultural lands are subdivided. Under the 1973 Montana Subdivision and Platting Act, "subdivision" is defined as any division of land that creates one or more parcels containing less than 20 acres. The act requires that county government review some of these subdivisions to ensure compliance with state and local regulations, but it also grants numerous exemptions to the review process. The most often used include:

- *Acreage exemption.* Parcels 20 acres or larger are exempt.
- *Family conveyance.* Parcels of any size may be given or sold without review to members of the landowner's immediate family.
- *Occasional sale.* Landowners may sell one parcel of land of any size once a year. This definition has been interpreted to apply only to the land and not to the landowners. For example, a person owning two parcels can make one occasional sale per parcel per year.
- *Remainder sale.* The sale of a parcel "left over" from another land division is exempt from review. For example, a 12-acre parcel is split into two five-acre lots; the remaining two-acre parcel can be sold through a remainder sale (Mangiameli 1991).

With exemptions, de facto subdivisions are created without review of possible impacts. In a recent example, a 20-acre parcel was created through the acreage exemption, then split into seven parcels, ranging from 11.96 acres to .9 acres, through a court order and use of the occasional sale and family conveyance exemptions. This process took only 30 days.

The desire to be close to nature increasingly puts people into conflict with wildlife. Photo/Robert Henderson

The subdivision review process allows some mitigation for impacts to conservation resources, while exemptions do not require any attempt to avoid or limit possible negative impacts on natural resources. In some cases, exemptions result in moderate home densities spread over considerable acreage. In others, they may be the first step toward a high-density subdivision, setting a precedent for further development.

Most subdivisions do not go through the review process. Of the almost 4,400 acres subdivided in Missoula County in 1987, only 186 went through the public review process. In the first nine months of 1991, 207 acres were reviewed, while 2,880 acres were surveyed through exemptions (Missoula County 1991). From 1987 through September 1991, only five percent of the 18,336 acres divided and subdivided in the county were formally reviewed. Even after review, counties may approve subdivisions that will destroy important wildlife habitat (Kiesling and Schneider 1978).

Reviewed or not, subdivision and subsequent habitat changes are often insidious, with one apparently minor development eventually followed by another. Since changes in the process are piecemeal, the significance of the accumulating habitat losses is seldom understood until little is left to protect.

The pattern of legal approval of habitat loss can change. In 1985, the Missoula County Commissioners directed their rural planning staff to create a natural resource planning program for the county. Initially, the program hired a consultant to complete an inventory of natural and cultural resources in Missoula County. The staff received training in conservation land-use techniques, and the commissioners began to incorporate this information into land use decisions.

When local governments include adequate natural resource information, the subdivision review process can result in designs that minimize habitat loss. Unfortunately, not all county governments include information such as wildlife habitat in their decisions on land use. But there are other habitat protection techniques available to institutions, conservationists and landowners.

The most successful programs are the acquisition and lease of important habitats by state wildlife and federal natural resource agencies. The Montana Department of Fish, Wildlife and Parks, U.S. Fish and Wildlife Service, Forest Service, Bureau of Land Management and National Park Service have funds for habitat protection and the expertise to manage habitat. Local examples include

Once land sales are publicly advertised, chances for natural resource protection are reduced. Photo/Amy and Pat O'Herren

Montana's acquisition and lease of more than 60,000 acres of winter range in the Blackfoot-Clearwater Wildlife Management Area, acquisition of the Lee Metcalf National Wildlife Refuge for wetland protection and development by the U.S. Fish and Wildlife Service, and establishment of the streamside Rattlesnake Greenway with Land and Water Conservation Funds administered by the Forest Service.

The conservation easement is a recent and promising way to protect wildlife habitat on private lands. A conservation easement is a legal agreement made by a landowner to restrict certain uses of a site in order to conserve natural resources. Donors of an easement retain title to the property. Easements are tailored to the property and the interests of the individual owner. For example, an easement could incorporate a plan to enhance old-growth forest *and* provide income for the landowner.

People grant conservation easements to protect their land from inappropriate development and still retain ownership. The owners then know that the property's resource values will be protected indefinitely, regardless of any new owner's objectives.

Easement donors who wish to claim tax benefits for the gift must donate or sell it for less than fair market value to a public agency or a qualified organization (as defined under Internal Revenue Code Section 501(c)(3)). The easement must be granted in perpetuity and contain at least one of the following conservation purposes:

- The preservation of land areas for outdoor recreation by, or the education of, the general public
- The protection of a relatively natural habitat of fish, wildlife, plants or ecosystems
- The preservation of open space, including farmland and forestland, for the scenic enjoyment of the general public
- The preservation of an historically important land area or a certified historic structure (Diehl and Barrett 1988).

Baseline data documenting the conservation values of the property must be collected before the easement can be donated.

Particularly important to the success of a conservation easement is the development and enforcement of a monitoring plan. Most organizations establish a stewardship fund, and landowners are often asked to contribute at the time of the easement donation. In most cases, inspections are done annually to document the condition of the property.

The first attempt in Montana to get legislative recognition of conservation easements was made in 1974, by landowners along the Blackfoot River in Missoula County (Knight and Dye 1981). They developed a sophisticated management plan, which included the use of conservation easements, to address increased recreational use and residential development. However, the plan could not be implemented because state law contained no definitions of easements or how and to whom they could be granted.

The lobbying efforts of the Blackfoot group and other organizations led to enactment of the Montana Open Space and Voluntary Conservation Easement Act of 1975, which provided the legal foundation for the Blackfoot River program and similar programs throughout the state. To date, 14 easements have been created along the river, protecting scenic and ecological resources on more than 2,870 acres.

A notable example of how a combination of tools can be applied in one project is the Grant Creek Ranch near Missoula. The owners, Grant Creek Associates, decided to subdivide less critical portions of the ranch and donated more than 500 acres of elk and deer winter range to the National Wildlife Federation. The owners retained livestock grazing but granted a conservation easement to the NWF for an additional 1,500 acres of winter/spring habitat. Restrictions of the easement include prohibition of subdivision and building of new homes, mineral exploration, new road building and removal of raptor nest trees. Any timber harvested on the property must follow a specific management plan to avoid impacts on water quality, wildlife habitat and aesthetic values. Over 100 head of elk benefit from this creative plan, which included subdivision design, conservation easement and transfer of deed.

Another land preservation tool is the conservation bond. In 1980, Missoula residents voted to create a $500,000 bond to purchase important scenic open space. The three areas identified for acquisition included two mountains bordering the town — Mount Sentinel and Mount Jumbo — and lands along the Clark Fork River, which flows through town. The city has acquired a 500-acre easement on

Mount Sentinel, more than 40 acres along the river and deed to 125 acres on Mount Jumbo, where nearly 100 elk and numerous deer winter. Several Mount Jumbo landowners have voluntarily restricted some public access on the land during critical times for wildlife (December through March).

Land exchanges can also protect winter/spring habitats. In the Rattlesnake area north of Missoula, the Lolo National Forest gained some critical land for habitat and recreation through exchanges with private landowners and the Montana Power Company. Such exchanges are often feasible when surplus lands are available and funds for purchase are tight. Exchanges frequently require lengthy negotiations.

Private non-profit organizations, such as land trusts, are becoming more active in habitat protection, especially as government agencies are increasingly limited by manpower, funding and legal and political realities. Two land trusts are active statewide in Montana — the Montana Land Reliance and The Nature Conservancy. Others with regional focus include Five Valleys Land Trust, Gallatin Valley Land Trust, Flathead Land Trust and Vital Grounds. These trusts most often use easements. However, some negotiations with landowners include outright gifts, bargain sale transactions, fair market purchases, reserved life estates, deferred giving and design solutions for limited development.

With the various instruments for habitat protection, funding sources, government jurisdictions and interested organizations comes the challenge of coordination and cooperation. Individual groups working in isolation can protect isolated parcels, inadequate for conserving large, free-roaming populations of elk and deer. There is also the possibility of duplication of efforts and squandering of limited resources. Recognition of the potential for these problems led to an agreement by Missoula County, the Lolo National Forest, Montana Department of Fish, Wildlife and Parks and Confederated Salish and Kootenai Tribes to work together on resource protection issues.

Since subdivisions are built on privately owned lands, landowners' ideas, needs and objectives are critical ingredients in any program, both to find solutions compatible with their objectives and to protect lands most valuable to wildlife. To this purpose, a coalition of agencies and organizations recently identified three elk winter/spring ranges most threatened by development in the Missoula Valley. The coalition then opened discussions with the owners involved, Interestingly, the owners have different objectives and are interested in different ways of protecting elk habitat. Such an environment of potential cooperation requires sensitivity and flexibility, as well as knowledge of habitat requirements and the tools available for habitat protection.

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It took two to five million years for what was to become Missoula County to reach a population of 44,000 in 1960. Twenty-eight years brought an additional 33,000 people. These numbers make it obvious that is is no longer possible to plan only for 1991. Our human population will continue to grow, and only planning can help mitigate the effects of that growth on the wildlife populations that currently coexist with us.

The West offers space — living, working and recreating space. We have resources, and others want them. We have decided, as one Missoula County Commissioner put it, to invite the world to our backyard. The state of Montana spent about $5 million in 1990 to advertise its "unspoiled, unforgettable" treasures. Our challenge is to protect these treasures from the very people who want to enjoy them. Wildlife management is still "an attempt to deal with the . . . question: "How shall we conserve wildlife without evicting ourselves?" (Leopold 1933). Little has changed since Leopold's time, except the urgency with which we pose the question.

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SOCIO-ECONOMIC ANALYSIS

HARRIS LAND AND CATTLE COMPANY

CONSERVATION EASEMENT

SOCIO-ECONOMIC ASSESSMENT

MONTANA FISH, WILDLIFE AND PARKS

Prepared by:
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January, 1998

I. INTRODUCTION

House Bill 526, passed by the 1987 Legislature (MCA 87-1-241 and MCA 87-1-242), authorizes Montana Fish, Wildlife and Parks (MFWP) to acquire an interest in land for the purpose of protecting and improving wildlife habitat. These acquisitions can be through fee title, conservation easements, or leasing. In 1989, the Montana legislature passed House Bill 720 requiring that a socioeconomic assessment be completed when wildlife habitat is acquired using Habitat Montana monies. These assessments evaluate the significant social and economic impacts of the purchase on local governments, employment, schools, and impacts on local businesses.

This socioeconomic evaluation addresses the purchase of a conservation easement on property presently owned by the Harris Land and Cattle Company. The report addresses the physical and institutional setting as well as the social and economic impacts associated with the proposed conservation easement.

II. PHYSICAL AND INSTITUTIONAL SETTING

A. Property Description

The Harris Land and Cattle Company property is located about 30 miles east of Great Falls near the community of Highwood in Chouteau County. This easement encompasses 10,000 acres of intermountain grasslands and riparian corridors. A detailed description of this property is included in the environmental assessment (EA)

B. Habitat and Wildlife Populations

Substantial numbers of mule deer use the property annually with higher numbers during the winter months. White-tailed deer use the area with elk occasionally using parts of the property during the spring and fall. Sharp-tailed grouse inhabit this land year-round as do ring-necked pheasants. The habitat also supports a host of nongame species. In addition, Highwood Creek sustains a brook and rainbow trout fishery.

C. Current Use

The property is working ranch. The ranch supports a cattle operation and contains some classified forest land suitable for timber harvest.

D. Management Alternatives

1) Purchase a conservation easement on the property by MFWP
2) No purchase

Alternative 1, the purchase of a conservation easement will provide long term protection for the agricultural activities this land supports as well as allow for the protection and enhancement of the native habitats and wildlife this land sustains.

The second alternative, the no purchase option, does not guarantee the protection of these resources from future development.

MFWP Purchase of Conservation Easement

The intent of the Harris Land and Cattle Company conservation easement is to protect and enhance the wildlife habitat currently found on the property while maintaining the various commercial uses of the property. In addition, this easement will provide public access to the property in perpetuity. The Deed of Conservation Easement specifies the terms of the agreement. The major points presented here may affect the socioeconomic environment. They are:

1) Restrict residential subdivision or commercial development.
2) No commercial use of land and resources except those allowed by the Easement.
3) No new buildings or construction except that allowed by the Easement.
4) Mineral exploration/extraction are limited by the terms of the Easement.
5) Timber management conducted in accordance with the terms of the Easement.
6) Rent dwellings for bed and breakfast purposes is allowed.
7) Owners may use a natural spring for a water development project and may market spring water from 2 additional springs.
8) No outfitting or fee hunting

A complete list of the restrictions this easement has on the landowners and MFWP is provided in the Deed of Conservation Easement for the Harris Land and Cattle Company.

No Purchase Alternative

This alternative requires some assumptions since management of the property will vary depending on what the current owners decide to do with the property if MFWP does not purchase a conservation easement.

Subdivision or development of the land is a possibility given the properties proximity to Great Falls. In addition, current commercial uses of the land may be expanded which could harm the wildlife habitat. Public access has been limited in the past due to outfitting. The economic impacts associated with this alternative have not been calculated.

III. SOCIAL AND ECONOMIC IMPACTS

Section II identified the management alternatives this report addresses. The purchase of a conservation easement will provide long term protection of important wildlife habitat, help to preserve the open space characteristics of the area, keep the land in private ownership and provide for public access for hunting and fishing. Section III quantifies the social and economic consequences of the two management alternatives following two basic accounting stances: financial and local area impacts.

Financial impacts address the cost of the conservation easement to MFWP and discuss the impacts on tax revenues to local government agencies including school districts.

Expenditure data associated with the use of the property provides information for analyzing the impacts these expenditures have on local businesses (i.e. income and employment).

A. Financial Impacts

The financial impacts on MFWP are related to the purchase price of the conservation easement and maintenance/management costs. The Harris Land and Cattle Company conservation easement will cost MFWP $1,500,000. Maintenance/management costs related to the easement are associated with monitoring the property to insure the easement terms are being followed. These costs are unknown at this time.

The financial impacts to local governments are the potential changes in tax revenues resulting from the purchase of the conservation easement. The Harris Land and Cattle Company conservation easement will leave the land in private ownership and will not change the type or level of use on the property. There will be no significant changes in tax revenues to local governments including schools due to the easement.

B. Economic Impacts

The purchase of a conservation easement will not adversely affect the commercial activities on the Harris Land and Cattle Company property. Consequently there will not

be any significant financial impacts to local businesses associated with the ranching/farming activities.

The terms of the easement allow the owners to expand their commercial activities in two different areas: market spring water from the property and rent the dwellings on the property for a bed and breakfast type operation. Both of these will have a positive impact on local area businesses.

FINDINGS AND CONCLUSIONS

As noted at the beginning of this document, the Harris Land and Cattle Company property is located in Chouteau County about 30 miles east of Great Falls, MT..

This easement will provide long term protection for wildlife habitat. An easement on this property would also ensure public access in an area of the state where public access is difficult to find.

The purchase of a conservation easement by MFWP will not cause a reduction in tax revenues to Chouteau County.

The agricultural/ranching operations will continue at their current levels. The financial impacts of the easement on local businesses will be neutral to positive if the ranch choose to move into the other commercial operations allowed by the conservation easement..

The purchase of a conservation easement on the Harris Land and Cattle Company property appears to be in the public interest.